

AGIS Update 6.0 (August 31 , 2026)

New:

- Fixed all known bugs in the demo project.
- New interaction system. You can now interact with an item's inventory while it is on the ground without equipping it.
- Added an Item UID variable to the ItemInfo struct; every item now has a unique identifier.
- Replaced ItemObjects with InstancedStructs. ItemObjects are no longer used.
- You can now add items to your character at any time via console commands (e.g., AddItem Ammo 30).
- Added a Slot Blocking system (e.g., equipping an item to the Body slot can block the Vest slot).
- Added an Item Preset system: presets can be created via Utility Widgets and used in the spawner or added directly to the inventory.
- Added "Spawn with Physics" and "Fix Position" options to the spawner.
- Added a text block over ItemWidget during drag-and-drop operations to display the reason if an operation fails.
- Added a "Buy Option" enum to the Inventory_Vendor component to configure vendor behavior.
- Added MeshTag to ItemDefaults, allowing you to specify which skeletal mesh an item attaches to when a character uses multiple skeletal meshes.
- Added helper functions to modify container slot size at runtime.
- Double-clicking the Inspect screen now resets the view, and holding right-click allows you to pan the camera position (previously rotation only).
- The example rifle in the project now consists of 10 separate items, using a chained attachment system (Body -> Barrel -> Flashlight -> Battery).
- A new example pistol is added to the project.
- Added an AGIS button at the top bar of the project for quick access to all utility widgets.

- Added a Utility Widget as an example for the **crafting system**.
- Creating InventoryData no longer requires opening the utility widget; you can now simply right-click the widget and select "Create Inventory Data".

Changes & Improvements:

- **ItemObjects are removed from the project.** An UObject alternative, "Instanced Structure", is being used now. It can be replicated to clients without any modification or plugin.
- Removed the holdable item class. All blueprints inheriting from BP_ItemBase are now designed to be held in hand.
- Removed AttachmentHandler component. The item blueprint itself now handles attachments and includes dispatchers for the attachment system.
- PrimaryUse and SecondaryUse events on items are now called client-side without needing a server request.
- Replaced linear search with maps for container and item lookups in the inventory.
- Added detailed descriptions and increased comment boxes for all functions and parameters in the Inventory Components.
- Replaced all RPCs used for widget synchronization in the Inventory Component with a RepNotify system. Added multiple detailed dispatchers triggered on both server and client.
- Decoupled locomotion from the Combat Component and moved it to the ExampleCharacter blueprint.
- Moved item-specific Input Actions (e.g., flashlight and fire keys) from the inventory component into individual item blueprints.
- Improved attach, detach, and physics systems for items.
- Categorized slot gameplay tags under the "Slots" category.
- Item attachment data is now stored directly inside the Items DataTable instead of Data Assets.
- Multiple data tables can and composite data tables can be used for easier categorization.

AGIS Update 5.0 (March 3, 2025)

- **Container UID** and **Slot ID** variables have been organized into a structure.
- All Blueprint variables have been **categorized**.
- Fixed a UI bug where outlines were not affected by fade during the inventory toggle animation.
- Key signs has been added to equip slots. Also equip slot title can be overrode.
- Added **Foreground and Background Textures** to equip slots.
- Added (optional) gradient background to item widgets and inspect screen.
- Now inspect screen rotation & zoom is smoother.
- The initial position of the inspect screen camera can now be set in DataTable.
- **Item textures have been divided** into Constant Texture, Runtime Texture, and Combined Texture. Optional Runtime Textures are generated by rendering items in-game, eliminating the need for multiple texture combinations for items with attachments. However, if texture combinations are still needed, you can manually set which texture should be used when an item is combined with another.
- Added a **loading animation** when item images are being loaded.
- Removed the "Banned Item Types" list as it is no longer needed.
- Slot Type enumeration has been replaced with **Unreal Engine's GameplayTag system**, making slot organization much more structured and adding new slot types easier.
- Drag Drop and other widget processes have been significantly **optimized**.
- Locomotion has been improved, **footsteps and IK** system has been added. (They are still entirely optional.)
- Inventory Component has been hierarchically structured for optimization and readability. There are now **six different inventory components** with specific functions.
- Item actor back-end has been completely refactored. In previous AGIS versions, item actors on the ground and equipped item actors were different classes. Now, they share the same class. This eliminates many restrictions about items.

- **Physics** has been added to items. When dropped, items are thrown with physics instead of teleporting.
- The Optional Item Mesh feature has been added to prevent creating a separate class for every item. For simple items without unique functions, you can now select a mesh for the item in DataTable instead of creating a class.
- **Attachment system** has been added. Now, you can attach any item to another item without limitations, except for the rules you set. You can test this by attaching a suppressor and flashlight to a rifle in the demo.
- The rifle firing logic has been refactored. Instead of directly using bullets from the inventory, you now need to load bullets into a magazine and then attach the magazine to the weapon. Surely this is just an example, and you can create your own weapon logic as needed.
- **Many new 3D models** including backpacks and armor have been added for the demo. The demo map has been redesigned.
- **The save system has been redesigned.** Saving the inventory is now much easier, and even variables inside UObject can be saved.
- The UID system has been moved from Gamemode to GameInstance, preventing UID conflicts between levels.
- Extra trade options have been added for the Vendor.
- The crafting UI has been removed as it was too basic and unnecessary.
- A **new verification option** called Verify Distance has been added to improve client interaction. There are now three verification options: Trust Client, Verify Distance, and Copy Trace.
- Fixed bugs caused by lag.
- Spawners can now spawn items multiple times.
- Slot appearances are now much easier to modify, and slot appearance-related bugs have been fixed.
- Added **Smelter and Campfire** to cook food & smelt ores (For example survival elements)

- **Documentation** has been updated and moved to the new website.



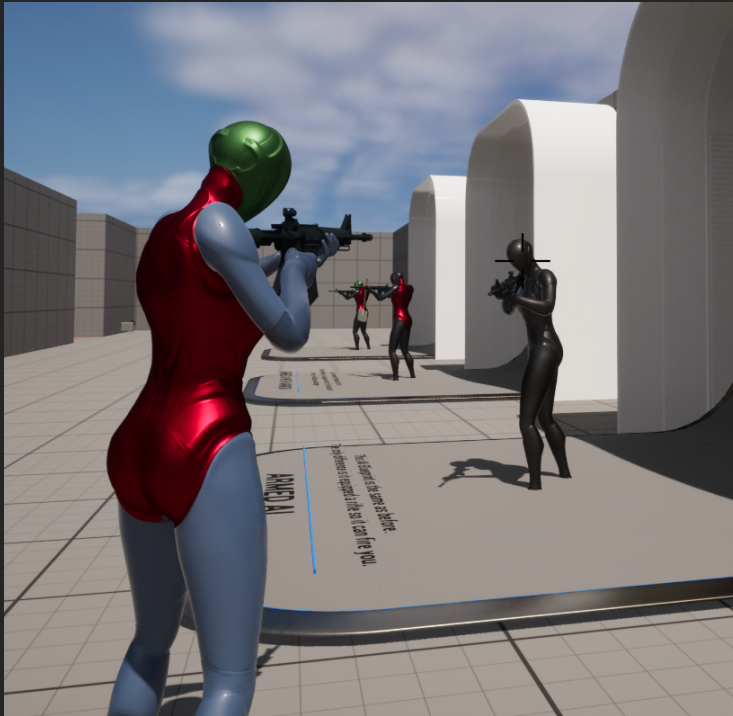
UI Update 4.0 (May 4, 2024)

- Minor & major bug fixes.
- Better Save Game operations.
- Item menus have been added. Right-clicking on the Item widget reveals the options.
- Admin Panel has been added.
- Attachment section moved to Inventory Component.
- Now nesting level can be limited. You can decide at most how many backpacks or vests will fit inside each other.
- Optimized some widgets that were causing FPS drops.
- Zoom is available during inspect.
- Some example items like gloves, headphone, flashlight, battery, fuel canister, generator has been added. More examples for interaction with objects.
- “Initial Items” variable has been added to inventory.



Locomotion Update (April 2, 2024)

- We realised that document was lacking in some topics and we wanted to fix this problem at the same time as all the other problems. Current document is much bigger.
- Added Locomotion System and Turn-in-place.
- Item Collisions assigned to preset. Now it's much easier to interact.
- Input mappings have been added: Inventory and in-game. Now they are separated.
- Gamemode and Controller casts have been removed, integration is now much easier.
- Minor Vendor bugs fixed.
- Fixed some visual problems in the slots.
- Added AI and improved inventory algorithms. Now you can kill and loot AIs or other clients.
- Added items like weapons and armor that can be held and used



Hotfix #2 (March 7, 2024)

- Now, even if the item is in another inventory, the player can open it with a right click.
- Now the item inventory window closes if the right-clicked item is dropped.
- Incorrect pricing on using split when buying or selling the item has been fixed.
- Sometimes equipped items not appearing on character has been fixed.
- Fixed minor visual bugs on movable windows.
- Fixed a visual widget bug when two clients interact with the car at the same time.

Hotfix #1 (March 4, 2024)

- Players can no longer sell money to the Vendor.
- Informations on integrating your own character is documented.

- The code has been optimized even more. Many casts have been removed, some functions have been edited.
- Items can now be dropped directly from the loot window. (Previously the player had to transfer them to his own inventory first)
- Fixed the bug of ignoring rotate when transferring items.
- Fixed the item disappearing by putting the item inside itself.

Vendor Update (March 3, 2024)

- New Equip System (Updated codes, more simple and modular now.)
- Vendor and Currency added to asset (Trading is available)
- The top of the loot window now displays the name of the inventory the player is interacting with.
- Document updated according to newly added features
- Fixed a very rare bug of assigning the same UID to two different containers.
- Fixed a bug that caused Drag&Drop colours to display incorrectly
- Fixed a minor bug when placing an item which has own inventory to Storage.



